Appendix E Summary of the Superfund Program [1995-1997]

The U.S. Environmental Protection Agency (EPA) is committed to accelerating the pace of hazardous waste site cleanup. As part of this commitment, EPA has placed 220 National Priorities List (NPL) sites into the construction completion category during FY95-FY97 for a total of 498 NPL sites in this category.

Throughout FY95-FY97, EPA successfully encouraged potentially responsible parties (PRPs) to undertake and finance cleanup efforts at Superfund sites. By the end of FY97, PRPs led more than 69 percent of remedial designs (RDs) and remedial actions (RAs) started during the fiscal year. During FY95-FY97, EPA continually improved the effectiveness of the Superfund program through the continuation of SACM, the implementation of administrative reforms and the brownfields initiative, reorganizing the Superfund program, and supporting reauthorization efforts with Congress.

Superfund Accelerated Cleanup Model

EPA's continued implementation of the Superfund Accelerated Cleanup Model (SACM) resulted in streamlining the cleanup process and changed the paradigm of doing business in Superfund. SACM allows for rapid reduction of risks at Superfund sites and long-term restoration of the environment. SACM introduced significant improvements to the existing cleanup process by:

 eliminating sequential and duplicative studies by combining site assessment and investigation activities;

- removing the existing overlap between the types of cleanup actions done under the Superfund removal program and those done under the remedial program, to save time and money; and
- redefining Superfund cleanup actions as early and long-term actions.

Administrative Reforms

EPA improved the effectiveness of the Superfund program by further refining initiatives and identifying administrative changes to be made within the existing statutory and regulatory framework. Three rounds of reforms have been launched, including the second round and third rounds, in FY95 and FY96, respectively. Each round of reforms brought about a number of new or enhanced initiatives and continued ongoing initiatives. Collectively, the initiatives involve diverse activities such as promotion of economic redevelopment, enforcement reform, environmental enhancement of community involvement, improvement of cleanup effectiveness and consistency, and expansion of the roles of states and Indian tribes. Examples of specific initiatives include:

Round 2

- testing the allocation process under which neutral parties allocate shares among responsible parties;
- providing relief to lenders by clarifying application of liability exemption;

- promoting economic redevelopment by archiving sites from CERCLIS determined to be of no further federal Superfund interest and awarding Brownfields pilots;
- reducing the cost and duration of cleanup through additional groundwater and land use guidances; and
- initiating a voluntary cleanup program to speed the cleanup of non-NPL sites.

Round 3

- compensating settlors for a portion of orphan shares, thereby reducing the responsibility of cooperative parties for shares attributable to insolvent parties;
- increasing the number of protected small contributors:
- reducing oversight of cooperative parties performing remedies and decreasing transaction costs;
- establishing a National Remedy Review Board to review proposed cleanup actions and help reduce cleanup costs;
- initiating remedy "Rules of Thumb" to produce time and cost savings;
- allowing economic redevelopment with the partial deletion of some sites; and
- fostering consistency among Regions for faster, fairer cleanups, reasonable risk assessments, and reduced PRP oversight.

Brownfields Initiative

EPA also promoted the redevelopment of abandoned and contaminated properties once used for industrial and commercial purposes ("brownfields"). EPA believes that environmental cleanup is a building block to economic redevelopment and must go hand-in-hand with bringing life and economic vitality back to communities.

The FY95 Brownfields Economic Redevelopment Initiative is a comprehensive approach to empower state and local governments, communities, and other stakeholders interested in economic redevelopment to work together in a timely manner to prevent, assess, safely cleanup, and sustainably reuse brownfields. In 1995, the General Accounting Office (GAO) estimated that there are 450,000 brownfields sites in the United States.

EPA addressed implementation of the initiative through the Brownfields Action Agenda and the subsequently established Brownfields National Partnership Action Agenda. The Agendas comprise a collection of bold strategies:

- implementing Brownfields pilot programs in cities, counties, towns, and Tribes across the country;
- clarifying liability and other issues of concern for lending institutions, municipalities, prospective purchasers, developers, property owners, and others;
- establishing partnerships with other EPA programs, federal agencies, states, cities, stockholders, and organizations;
- promoting community involvement by supporting job development and training activities linked to brownfield assessment, cleanup, and redevelopment; and
- linking environmental protection with economic redevelopment and community revitalization.

By the end of FY97, EPA had announced the selection of 121 Brownfields Pilots to be funded through cooperative agreements worth up to \$200,000 each for a two-year period. These pilots are either funded through Headquarters or the 10 Regional offices. The pilots are intended to provide redevelopment models, direct efforts toward removing regulatory barriers, and coordinate public and private efforts at the federal, state, and local levels.

Superfund Program Reorganization

EPA's Office of Emergency and Remedial Response (OERR) was reorganized in FY96 from a hierarchical, four division structure to a matrix organization with 14 centers of expertise. The reorganization had several distinct purposes:

- to accelerate site cleanup;
- promote teamwork;
- empower states; and
- provide better customer service.

Reauthorization Activities

EPA continued to work with Congress on reauthorization issues. CERCLA was last amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA).

The major Superfund program areas include: Site Evaluation, Emergency Response, Remedial Progress, Enforcement Progress, Federal Facility Cleanups, Resource Estimates, and Superfund Program Support Activities.

Site Evaluation

Over FY95-FY97, EPA's progress in identifying and assessing newly discovered sites has resulted in a total of over 40,100 sites identified in the CERCLA Information System (CERCLIS). CERCLIS is Superfund's inventory of potentially threatening hazardous waste sites that require further federal Superfund program attention.

Through FY97, the Agency had begun work at over 98 percent of the 1,405 sites proposed to, listed on, or deleted from the NPL. Through the end of FY97, a total of 156 sites have been deleted from the NPL.

EPA carried on the implementation of SACM that encourages EPA Regions to reduce repetitive tasks and cost by combining certain site assessment, long-term remediation program, and removal program activities.

The NCP was modified so that CERCLIS sites needing no further EPA-financed response actions could be placed in a separate "archived" database. During FY95-FY97, EPA also proceeded with ongoing efforts to address technical complexities and improve site evaluation guidance.

During the 1995-1997 time period, EPA has undertaken projects to address brownfields issues by establishing the Brownfields Economic Redevelopment Initiative in FY95. This initiative is directed toward empowering states, local governments, communities, and others to work together to assess and safely cleanup brownfields sites.

Emergency Response

To protect human health and the environment from immediate or near-term threats, EPA and potentially responsible parties (PRPs) started nearly 830 removal actions and completed more than 889 removal actions during FY95-FY97. Through the end of FY97, more than 4,490 removal actions have been started and nearly 3,939 have been completed since the inception of the Superfund program.

The removal authority for "early actions," has been expanded to reduce immediate risks and expedite cleanup at NPL sites. The expansion was a key element of SACM. Early actions may include emergency, time-critical, or non-time critical removal responses or quick remedial responses.

Under the reportable quantities (RQ) regulatory requirements, EPA proposed an expanded exemptions rule (60 FR 40042) under which exemptions may be granted for releases of naturally occurring radionuclides associated with land disturbance due to certain mining activities.

EPA also issued guidance during FY96 that provides answers to common removals/RQ adjustment questions and concerns of the regulated community and general public. Additional guidance was completed on the removal response to radiation sites.

Remedial Progress

Accomplishments during FY95-FY97 reflect EPA's continued efforts to accelerate the overall pace of cleanup and complete cleanup activities at an increasing number of sites. During the period, cleanup activities resulted in the placement of 220 additional NPL sites in the construction completion category for an overall total of 498 NPL sites in this category. Also started by EPA or PRPs were nearly 107 remedial investigation/feasibility studies (RI/FSs), more than 230 remedial designs (RDs), and more than 328 remedial actions (RAs). EPA signed 492 records of decision (RODs) at Fund-financed or PRP-financed sites.

Two components of the remedial program with significant activity during FY95-FY97 were the fiveyear review program and the Superfund Innovative Technology Evaluation (SITE) Program. A total of 146 five-year reviews, required by CERCLA Section 121(c), were carried our during this period. These reviews assure that human health and the environment are being protected by the selected remedial action. The SITE Program demonstrates and evaluates full-scale, innovative hazardous waste treatment technologies. In FY96, the program shifted from a technology-driven focus to one that was more integrated, driven by the needs of the waste remediation community. EPA's technology transfer and interagency coordination efforts have long been recognized leaders in the technology innovation arena, and are continually enhanced through conferences, demonstrations. and reference publications.

Enforcement Progress

Accomplishments during 1995-1997 reflect EPA's continuing commitment to maximizing PRP involvement in financing and conducting cleanup and recovery of Superfund monies expended for response actions. Over the three-year period, EPA has achieved enforcement agreements worth approximately \$2.2 billion in PRP response work. Through its cost recovery effort, EPA achieved approximately \$769 million in cost recovery settlements and collected more than \$822 million for reimbursement of Superfund expenditures in FY95-FY97. By the end of FY97, EPA had collected a

total of over \$1.7 billion in cost recovery settlements, bankruptcy settlements, fines and penalties.

EPA has been working toward improving the efficiency and fairness of Superfund enforcement. Transaction costs have been reduced through SACM, three rounds of administrative reforms, and promotion of an "enforcement first" initiative to secure increased PRP financial involvement. The reforms of FY95 encouraged *de minimis* settlements and de micromis settlements. Other approaches to promote fairness and flexibility in settlements were continued, and guidance documents were issued in FY95, detailing specific approaches to enforcement fairness.

Federal Facility Cleanups

Federal departments and agencies are largely responsible for implementing CERCLA at federal facility sites. To ensure federal facility compliance with CERCLA requirements, EPA provides advice and assistance, oversees activities, and takes enforcement action where appropriate. For sites that are on the NPL, EPA must concur with the selected remedy. The June 27, 1997 Federal Agency Hazardous Waste Compliance Docket listed a total of 2,104 federal facilities sites. Of the sites on the docket, 157 were proposed to or listed on the NPL, including 151 final and six proposed sites.

Throughout 1995-1997, the closure of military bases was an important issue. Major achievements in FY95 led EPA and the Department of Defense (DoD) to determine which installations to include in the Fast Track Cleanup Program of the Base Realignment and Closure Act (BRAC) in FY96. These actions allow for expedited cleanup and reuse of bases scheduled for closure. Several interagency forums were also held during this time span, allowing EPA to make significant progress in addressing further concerns associated with federal facility cleanup.

Resource Estimates

Under Executive Order 12580, EPA is required to estimate the resources needed to carry out Superfund program responsibilities assigned to EPA and other federal departments and agencies. Since

the enactment of CERCLA in 1980, Congress has provided Superfund with \$17.7 million in budget authority (FY81 through FY97).

Estimates of the long-term resources required to implement Superfund are based on the Outyear Liability Model (OLM). The OLM provides longrange forecasts, with flexibility to refine these forecasts, and can be adjusted to accommodate many program-related variables. To calculate a cost estimate, the OLM reviews active NPL sites, sites yet to begin the remedial process, non-site costs, and factors related to remedial action costs. The OLM cost estimate of completing cleanup of current NPL sites is more than \$13.6 billion for FY97 and beyond, bringing the total estimated cost of the program to \$31.3 billion.

Superfund Program Support

Throughout 1995-1997, EPA has taken measures to enhance support activities in the Superfund program. These steps include efforts to improve community relations, enhance public access to information, strengthen EPA's partnership with states and Indian tribes, and increase minority contractor utilization.

In its community involvement efforts, EPA tailors activities to the specific needs of individual communities and identifies ways to enhance community involvement efforts. EPA emphasized the importance of effective community involvement with guidance that encourages the Regions to establish community advisory groups (CAGs) in FY96. EPA also continued to provide technical outreach to communities, hold national conferences community involvement, offer training workshops, and facilitate community access to technical assistance grants (TAGs). communities in obtaining technical assistance, EPA awarded 46 TAGs during FY95-FY97, bringing the total number of TAGs awarded since FY88 to 198. for a total value of more than \$13 million.

To enhance public access to Superfund information, EPA continued its partnership with the National Technical Information Service (NTIS), to provide Superfund document distribution services. EPA has fulfilled requests for more than two million

documents free of charge through NTIS, aided by a broadened use of electronic tools (e.g. the Internet and multimedia computers) initiated in FY96. A Superfund Order Desk is also maintained where single copies of documents or customized subscriptions may be purchased.

Performance Partnership Grants (PPGs) or Cooperative Agreements (CAs) may be awarded to states or tribes by EPA to support state and tribal involvement in the Superfund response activities. More than \$20 million is awarded annually in Core Program Cooperative Agreements (CPCAs). These agreements make it easier for Regions to assist states and tribes in developing comprehensive Superfund programs.

To promote small and disadvantaged business participation in Superfund contracting, EPA directly and indirectly awards Superfund work contracts to minority contractors. Direct procurement involves any procurement activity where EPA is a direct party to a contractual arrangement for supplies, services or construction. Financial assistance programs utilize indirect procurement methods. Awards and/or CAs are granted to eligible states, local municipalities, universities, non-profit and commercial institutions, hospitals and individuals. Direct procurement contracts totaled nearly \$151.5 million during FY95-FY97, while cooperative and interagency agreements with minority contractors totaling more than \$3.1 million and nearly \$104 million, respectively. In addition, EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) conducted a number of outreach activities during FY95-97, including seminars, conferences, and training sessions.

This page intentionally left blank